## 5 WHAT IS CLAIMED IS:

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- 1. An apparatus for controlling a microtome and a cooling chamber, which is positioned on the microtome, comprising:
  - a single control unit that integrates both operating elements for the microtome and operating elements for the cooling chamber; and
    - a single display is associated with the control unit, wherein the single display is, dependent from the specific configuration of microtome and cooling chamber, a user interface for the microtome and/or the cooling chamber.
- 15 2. The apparatus as defined in Claim 1, wherein on the display or screen the operating elements are presented to a user.
  - 3. The apparatus as defined in Claim 1, wherein the control unit is configured in such a way that a cooling chamber connected to the microtome is visible on the display; and the control unit modifies or adds to the operating elements presented on the display in accordance with the operating elements for the cooling chamber.
- 4. The apparatus as defined in Claim 1, wherein at least one input device isconnected to the control unit so that the operating elements are assigned in user-defined fashion.
  - 5. The apparatus as defined in Claim 4, wherein the input device is a mouse, a trackball, a keyboard, a PDA, a touch screen, or a joystick.
  - 6. The apparatus as defined in Claim 1, wherein a detection device is provided that is connected to the control unit and detects a cooling chamber connected to the

- 5 microtome, and thereby invokes the set of operating elements for the cooling chamber present in the control unit.
  - 7. The apparatus as defined in Claim 6, wherein the detection device is embodied as a plug connector, a transponder, a scanner, or a barcode reader.

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